

## **REMARKS**

Applicant would like to thank the Examiner for the careful consideration given the present application. Applicant's undersigned attorney would also like to thank the Examiner for taking the time to discuss the application and the cited art.

The rejections of claims 1 and 3 based upon the prior art will be addressed hereinafter. Claims 4, 6, and 7 have been allowed, and will not be discussed further hereinafter.

Claim 1 as being unpatentable over US 6,166,907 to Chien in view of US 5,526,875 to Lin. For the following reasons, the Examiner's rejections are traversed.

First, with reference to claim 1, the Examiner has determined that Chien teaches "said plurality of blades each have an edge facing the front of the heat dissipating portion, each of the edges sloping gradually away from the heat dissipating portion as each of the edges extends in a radially outward direction from a rotating center of the impeller (As illustrated in Fig 5)". It is believed that the Examiner's interpretation of Chien is in error.

The invention defined in claim 1 of the present invention covers a structure such as shown in Fig. 12D. The drawing sheet containing Figs. 12A-12D, with supplementary labels for the Examiner's convenience, was attached to the prior response, filed on August 03, 2006, and is referred to hereinafter.

From the marked-up Fig. 12D, it can be seen that the blade edges slope gradually away from the heat dissipating portion as each of the edges extends in a radially outward direction from a rotating center of the impeller. An inspection of Chien, Fig. 5, provides no such structure. This is not surprising, as the description

provided by Chien is entirely silent on the structure of the blades, especially the configuration of the edges of the blades facing toward the heat sink.

With regard to the Examiner's interpretation of Fig. 5 of Chien contained on pages 7-8 of the Office action, it is noted that the features ascribed to the fan blades by the Examiner are nowhere found in the Chien disclosure. It is also noted in this regard that Fig. 5 of Chien has clearly been simplified for filing purposes, and from this figure the structure or shape of "an edge facing the front of the heat dissipating portion" cannot be known.

Thus, it must be concluded that the Examiner has forcibly identified the impeller shape of Chien by carefully reviewing claim 1 of the present invention and that the Examiner's conclusions are pure conjecture. It is again submitted that one could not understand the shape of the impeller and the relationship between the impeller and the heat dissipating portion merely by looking at Fig. 5 of Chien, without reading through claim 1 of the present application.

Further, it is again noted that the blades of Fig. 5 are clearly presented as a 'sketch', and are not depicted accurately. In this regard the Examiner will note that the blades have an irregular spacing and have no consistent shape or size. While it is true that the blades must be angled (in order to blow air), there is no requirement that the edge of the blades are sloping in any particular direction. Further, there is no disclosure in the Chien drawing Fig. 5 that indicates that the edge facing the front of the heat dissipating portion "sloping gradually away from the heat dissipating portion", as required. The 'edge' of Chien indicated by the Examiner appears to be curved laterally, but cannot clearly be seen as sloping in any direction relative to the heat dissipating portion. It appears equally as likely that the Chien 'edge' defines a

plane that is parallel to the front of the heat dissipating portion.

In this regard it is noted that most conventional fan blades are flat (i.e., parallel to the heat dissipating portion) or angled such that they slope gradually toward the heat dissipating portion as the edges extend in a radially outward direction from a center of the impeller. Accordingly, it is submitted that, due to the lack of disclosure in Chien, it must be concluded that Chien would be interpreted by one skilled in the art as teaching a conventional fan blade arrangement (i.e., one with 'edges' parallel to the heat dissipating portion or with 'edges' sloping gradually toward the heat dissipating portion as the edges extend in a radially outward direction from a center of the impeller). Therefore, it is respectfully submitted that Chien, when interpreted by one skilled in the art, would not be considered as teaching that the impeller blades "each have an edge facing the front of the heat dissipating portion, each of the edges sloping gradually away from the heat dissipating portion as each of the edges extends in a radially outward direction from a rotating center of the impeller", as required by claim 1. Insofar as the Lin reference is not cited as teaching this feature of the present invention, it is submitted that the proposed combination of Chien and Lin would likewise fail to teach the required structure of the blade edges.

Accordingly, it is submitted that the Examiner has failed to establish a *prima facie* case of obviousness, and claim 1 is considered to be allowable over the art of record. Reconsideration and withdrawal of the rejection of claim 1 is requested.

Claim 3 stands rejected as being unpatentable over Chien in view of Lin and US 2002/0145853 to Grouell et al.

Grouell is cited for teaching a fan containing a plurality of webs connecting a

housing of a motor and an end portion of an air channel body on the side of a discharge port are situated outside of the discharge port, or an end portion on the side of the discharge port is lower than an uppermost surface of the housing of the motor.

However, it is noted that Grouell does not correct the deficiencies of Chien as they relate to claim 1, from which claim 3 depends. Grouell, like Chien and Lin, fails to teach that edges of the impeller blades facing toward the heat dissipating portion are sloping gradually away from the heat dissipating portion as the edges extend radially away from the rotating center of the impeller. Since each of the references fail to teach this aspect of the invention, the proposed combination will likewise necessarily fail to provide this feature and, accordingly, the proposed combination fails to teach every aspect of the invention. As such, the Examiner has failed to establish a *prima facie* case of obviousness.

In light of the foregoing, it is respectfully submitted that the present application is in a condition for allowance and notice to that effect is hereby requested. If it is determined that the application is not in a condition for allowance, the Examiner is invited to initiate a telephone interview with the undersigned attorney to expedite prosecution of the present application.

If there are any additional fees resulting from this communication, please charge same to our Deposit Account No. 18-0160, our Order No. NIS-15441.

Respectfully submitted,

RANKIN, HILL, PORTER & CLARK LLP

By /David E. Spaw/  
David E. Spaw, Reg. No. 34732

4080 Erie Street  
Willoughby, Ohio 44094-7836  
(216) 566-9700